

CLAIMS

1. (Original) An information processing apparatus having a mouse cursor display function, comprising:

a display unit for displaying data on a bit mapped display screen;

a pointing device for designation a coordinate location on said display screen, and for directing scrolling and setting a scrolling speed for data displayed on said display screen;

mouse cursor control means for displaying a mouse cursor at a coordinate location on said display screen designated by said point device;

scroll control means for scrolling the data on said display screen in accordance with a display data scrolling instruction from said pointing device; and

scrolling speed display means for displaying a number of speed indicators during scrolling, the number of displayed speed indicators corresponding to a relative scrolling speed set by said pointing device while scrolling data on said display screen, and arranging the speed indicators in a scrolling direction relative to a center of said mouse cursor.

2. (Original) An information processing apparatus according to claim 1, further comprising means for changing a displayed image of the mouse cursor in response to whether a specific button of said pointing device is clicked or released.

3. (Original) In a computing environment, an enhanced mouse cursor for indicating a direction and a relative speed of scrolling of data displayed in a window on a display screen of an information processing apparatus that designates a coordinate location using a pointing device, said enhanced mouse cursor comprising:

a mouse cursor body located at the coordinate location designated by using said pointing device; and

one or more speed indicators displayed in a number corresponding to a scrolling speed while scrolling data on said display screen, wherein said mouse cursor body does not move during scrolling, and the number of speed indicators displayed corresponds to a speed at which a user is moving the pointing device.

4. (Original) An enhanced mouse cursor according to claim 3, wherein the speed indicators are displayed relative to said mouse cursor body in a direction in which scrolling is occurring.

5. (Original) An enhanced mouse cursor according to claim 3, wherein said one or more speed indicators are arranged relative to a center of said mouse cursor in a scrolling direction.

6. (Original) An enhanced mouse cursor according to claim 3, wherein of said enhanced mouse cursor is displayed only during a data scrolling operation.

7. (Original) A control method for an information processing apparatus having a mouse cursor display function, said apparatus including a display unit for displaying data on a bit mapped display screen, and a pointing device for designating a coordinate location on said display screen and for directing scrolling and setting a scrolling speed of data displayed on said display screen, said control method comprising the steps of:

(a) displaying a mouse cursor at a coordinate location on said display screen designated by said pointing device;

(b) scrolling data on said display screen in accordance with a display data scrolling instruction from said pointing device; and

(c) displaying speed indicators in a number corresponding to a scrolling speed set by said pointing device while scrolling data on said display screen, and displaying the speed indicators in a scrolling direction relative to a center of said mouse cursor.

8. (Original) Computer readable code stored on computer readable storage medium and executable by a computer system that includes a display unit for displaying data on a bit mapped display screen' and a pointing device for designating a coordinate location on said display screen and for directing scrolling and setting a scrolling speed for data displayed on said display screen, said code comprising:

(a) a routine for displaying a mouse cursor at a coordinate location on said display screen designated by said pointing device;

(b) a routine for scrolling data on said display screen in accordance with a display data scrolling instruction from said pointing device; and

(c) a routine for modifying the mouse cursor to include speed indicators in a number which corresponds to a relative scrolling speed set by said pointing device while scrolling data on said display screen and displaying the speed indicators in a scrolling direction relative to a center of said mouse cursor.

9. (Previously Presented) An apparatus, comprising:

an information processing system having a display, a keyboard, a lever input device embedded in the keyboard, and three buttons; and

a graphical user interface cooperating with said information processing system (a) to display a cursor at a coordinate position on the display designated by a manipulation of the lever input device and (b) to control system functions, wherein the lever input device, three buttons, and said graphical user interface cooperate (c) to activate a software program associated with a selected displayed icon when a first of the three buttons is depressed, (d) to display software program characteristics when a second of the three buttons is depressed, and (e) to scroll within a displayed window by manipulation of the lever input device when a third of the three buttons is depressed,

wherein the cursor indicates a direction and a relative speed of scrolling within the display window, and wherein the relative speed of scrolling is indicated by displaying a number of speed indicators that corresponds to a pressure at which a user is pressing the lever input device.

10. (Previously Presented) The apparatus according to claim 9, wherein said information processing system is a notebook computer system.

11. (Previously Presented) The apparatus according to claim 9, wherein the third button is disposed between the first and second buttons.

12. (Previously Presented) The apparatus according to claim 9, wherein a scroll message is originated upon depression of the third button.

13. (Previously Presented) An information processing apparatus, comprising:

a notebook computer system having a display, a keyboard, a lever input device embedded in the keyboard, and three buttons, the three buttons being a left button, a right button, and a middle button; and

a graphical user interface cooperating with said notebook computer system (a) to display a cursor at a coordinate position on the display designated by a manipulation of the lever input device and (b) to control system functions, wherein the lever input device, three buttons, and said graphical user interface cooperate (c) to activate a software program associated with a selected displayed icon when the left button is depressed, (d) to display software program characteristics when the right button is depressed, and (e) to scroll within a displayed window by manipulation of the lever input device when the middle button is depressed,

wherein the cursor indicates a direction and a relative speed of scrolling within the display window, and wherein the relative speed of scrolling is indicated by displaying a number of speed indicators that corresponds to a pressure at which a user is pressing the lever input device.

14. (Previously Presented) An information processing apparatus, comprising:

a notebook computer system having a display, a keyboard, a pointing device, a left button, a right button, and a middle button; and

a graphical user interface cooperating with said notebook computer system (a) to display a cursor at a coordinate position on the display designated by a manipulation of the pointing device, and (b) to control system functions, wherein the pointing device, three buttons, and said graphical user interface cooperate (c) to activate a software program associated with a selected displayed icon when the left button is depressed, (d) to display software program characteristics

when the right button is depressed, and (c) to scroll within a displayed window by manipulation of the pointing device when the middle button is depressed, wherein the cursor indicates a direction and a relative speed of scrolling within the display window, and wherein the relative speed of scrolling is indicated by displaying a number of speed indicators that corresponds to a speed at which a user is moving the pointing device.

15-16. (Cancelled)